Amendments to the Drawings:

The attached replacement and annotated sheet of drawing includes changes to FIG. 5 as follows.

FIG. 5 has been amended to amend the first occurrence of "56" to "54"

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

The Office Action mailed February 9, 2005 has been carefully considered. Reconsideration in view of the following remarks is respectfully requested.

Claims 1, 10, 16, and 25 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Support for these changes may be found in the specification on page 12, lines 7-8, 21-23 and page 15, lines 11-15. Claims 2-9, 11-15, and 17-24 have been amended to correct minor grammatical and editorial matters. No new matter has been added.

The 35 U.S.C. § 112, Second Paragraph Rejection

Claims 1-25 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention. This objection is respectfully traversed.

A. The Office Action states that in "Claim 1, 'mapping said subscriber to said reserved port bundle in a port bundle object' (line 14) is indefinite because it is not made explicitly clear in the claim language who or what is doing the mapping. For example, it is unclear if the subscriber is doing the mapping or if there is a manager or switch doing the mapping, or neither."

The Office Action failed to respond to Applicant's previous argument. Thus, Applicant refers back to the previous amendment and respectfully maintains that it is not required to claim

who or what performs each act in a method claim in order for the claim to be definite. The scope of the claim as written can be clearly understood in its original form, namely, it would cover anybody or anything performing that particular act or acts. In one implementation, a protocol gateway can perform each of the acts, but applicant maintains that it is not necessary for the acts to be performed by a protocol gateway, and that the claim can properly be read to apply to anyone or anything performing each act.

B. The Office Action states that "it does not make sense and is not understood how it is possible to map in a port bundle object."

Claims 1, 16, and 25 have been amended to read:

creating a mapping between the specific subscriber and the reserved one of the plurality of port bundles;
saving the mapping in a port bundle logical object;

Thus, the amendment clarifies that a mapping is created between the specific subscriber and the reserved port bundle, and then saved in a port bundle logical object. One of ordinary skill in the art would recognize that mapping into a data structure equates with creating a mapping and saving it in the data structure. That is how the term "mapping" is commonly used in the art. However, to avoid confusion, the claims have been amended to make this explicit.

C. The Office Action states that "it is not made explicitly clear in the claim language whether the 'object' is a physical object or a logical (software) one."

Claims 1, 16, and 25 have been amended to recite a "port bundle logical object" as requested by the Examiner.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance. It is respectfully requested that this rejection be withdrawn.

The First 35 U.S.C. § 103 Rejection

Claims 1-9, 16-20, and 25 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kadambi et al (USP 2001/0043611 A1) in view of Wirstrom et al. (USP 4,691,355), among which claims 1, 16, and 25 are independent claims. This rejection is respectfully traversed.

According to the Manual of Patent Examining Procedure (M.P.E.P.),

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.[1]

Specifically, the Office Action contends that the elements of the presently claimed invention are disclosed in Kadambi except that Kadambi does not "teach using authentication for issuing a request, receiving a response of the authentication of the subscriber and the assignment of the port afterwards." The Office Action further contends that Wirstrom "teaches assigning ports after a signal is detected, received and responded to with respects to authentication (col. 17,

[1] M.P.E.P § 2143.

lines 56-68)" and that it would be obvious to one having ordinary skill in the art at the time of the invention to "include the feature of using authentication for issuing a request, receiving a response of the authentication of the subscriber and the assignment of the port afterwards to the existing system and method of Kadambi in order to increase security."

In the Office Action, the Examiner did not set forth where each and every element of each and every claim rejected under this section is found nor did the Examiner address all of Applicant's arguments. Not only must a showing be made for the rejection to be legal, but it must be made in a manner which gives Applicant an opportunity to address it directly. The vague reference to the cited art cannot be meaningfully rebutted by Applicant and Applicant hereby formally requests that the Examiner set forth where each and every element of each and every claim rejected is found in the prior art reference. In any event, Applicant will attempt to respond to the vague rejection in the Office Action.

1) Neither Kadambi nor Wirstrom teaches "reserving one of the plurality of port bundles for the specific subscriber if the specific subscriber has not been assigned one of the plurality of port bundles, the plurality of port bundles associated with an aggregation device."

The Office Action states that Kadambi teaches the above limitation and cites page 9, [0117] and [0220], and claim 3 as allegedly providing evidence of this teaching. In response to Applicant's previous argument, the Office Action states that "reserving for specific users is not a limitation in the claim language." Claims 1, 16, and 25 have been amended to make clear that the reservation of the port bundle is a reservation for a specific subscriber.

As such, Applicant respectfully maintains that amended Claims 1, 16, and 25 are in condition for allowance.

2) Neither Kadambi nor Wirstrom teaches "changing an original source port number in a data packet to a port bundle number corresponding to the reserved one of the plurality of port bundles."

The Office Action states that Kadambi teaches the above limitation and cites "page 11 [0152], page 14 [0168], and page 17 [0204] (numerous ports can be "trunked" to increase bandwidth, where a trunk group can also be called a port bundle)" as allegedly providing evidence of this teaching. In response to Applicant's previous argument, the Office Action stated that on "page 14, [0168], Kadambi teaches using switches to change the port numbers and that numerous ports can be 'trunked' to increase bandwidth." The Office Action improperly equates 'trunking numerous ports' with 'changing an original source port number in **a data packet to a port bundle number**'. Kadambi teaches:

> [0168] During the configuration process wherein a local area network is configured by an administrator with a plurality of switches, etc., numerous ports can be "trunked" to increase bandwidth. For example, if traffic between a first switch SW1 and a second switch SW2 is anticipated as being high, the LAN can be configured such that a plurality of ports, for example ports 1 and 2, can be connected together. In a 100 megabits per second environment, the trunking of two ports effectively provides an increased bandwidth of 200 megabits per second between the two ports. The two ports 1 and 2, are therefore identified as a trunk group.

Therefore, Kadambi teaches connecting ports together, which are then identified as trunk groups. Although Kadambi equates a trunk group with a port bundle, Kadambi does not teach "**changing**

an original source port number in a data packet to a port bundle number corresponding to the reserved one of the plurality of port bundles" as claimed in amended Claims 1, 16, and 25. There is no evidence of any modification of an original source port number in a data packet to a port bundle number. Furthermore, while Kadambi may route a packet to a port bundle, that would involve modifying a destination port number, not a source port number.

Therefore, Applicant respectfully maintains that amended Claims 1, 16, and 25 are in condition for allowance.

3) Neither Kadambi nor Wirstrom teaches "creating a mapping between the specific subscriber and the reserved one of the plurality of port bundles; saving the mapping in a port bundle logical object."

The Office Action further contends that Kadambi teaches the above limitation and cites page 14, [0169] as allegedly providing evidence of this teaching. Paragraph [0169] states:

> [0169] SOC 10 is configured such that if a trunk port goes down or fails for any reason, notification is sent through CMIC 40 to CPU 52. CPU 52 is then configured to automatically review the trunk group table, and VLAN tables to make sure that the appropriate port bit maps are changed to reflect the fact that a port has gone down and is therefore removed. Similarly, when the trunk port or link is reestablished, the process has to be reversed and a message must be sent to CPU 52 so that the VLAN tables, trunk group tables, etc. can be updated to reflect the presence of the trunk port.

The Office Action failed to respond to Applicant's previous argument that the cited portion of Kadambi merely discloses trunk port failure and the reestablishment of the trunk port, both circumstances generating messages to the CPU to update appropriate tables. While these tables may contain mappings, there is no discussion of a mapping between a subscriber and a

reserved port bundle. Rather, the only discussion of mappings are of a "port bit map", which apparently refers to a simple bit mapping having an entry indicating whether or not a port is active for each of the ports.

It is respectfully asserted that Kadambi does not teach "creating a mapping between the specific subscriber and the reserved one of the plurality of port bundles; saving the mapping in a port bundle logical object" as claimed in amended Claims 1, 16, and 25. Should the Examiner maintain this rejection, it is respectfully requested that the Examiner point out specifically where in paragraph [0169] Kadambi teaches "creating a mapping between the specific subscriber and the reserved one of the plurality of port bundles; saving the mapping in a port bundle logical object." Otherwise, Applicant respectfully maintains that amended Claims 1, 16, and 25 are in condition for allowance.

4) **There is no suggestion or motivation to combine Kadambi and Wirstrom.**

Kadambi "relates to a method and apparatus for high performance switching in local area communications networks such as token ring, ATM, ethernet, fast ethernet, and gigabit ethernet environments, generally known as LANs. In particular, the invention relates to a new switching architecture in an integrated, modular, single chip solution, which can be implemented on a semiconductor substrate such as a silicon chip." (page 1, [0003]).

On the other hand, Wirstrom relates to a "security control system ... for interactively identifying and authenticating the authorization of a user of a communications terminal, and

optionally providing a means for decoding and encrypting communications signals transmitted to and from the terminal." (Abstract). To authenticate a user, Wirstrom provides for:

> security units 34, 44, 54 define ports 36, 46, 56, respectively. A plurality of user assigned devices 38, 48, 58 are provided, any one of which may be inserted into (i.e., operably connected to) any one of the ports 36, 46, 56. The devices 38, 48, 58 are each referred to herein by the term "encryption device." Each of the user assigned encryption devices 38, 48, 58 is assigned to a separate person, known as an "authorized user," who has been given authority to communicate with the host computer 20 ... each of the encryption devices 38, 48, 58 has a unique character that serves to identify the person unto whom it has been assigned and/or to evidence the authority of such person to access the host computer 20 ... [and] the user assigned encryption devices 38, 48, 58 cooperate with the security units 34, 44, 54 to generate authenticating signals for responding to authentication query signals that are sent by the host computer 20 ... to establish or reestablish the identification and/or authority of the users of the terminals 30, 40, 50. (col. 7, lines 7-39).

Thus, Wirstrom teaches the use of actual encryption devices placed into the ports or slots of security units connected to the computer. The user must then respond to authenticating query signals sent by the computer to establish identification.

Thus, the two prior art references teach away from each other since Kadambi teaches a switching architecture on a silicon substrate which does not require a user to respond for authentication and Wirstrom teaches placing a physical encryption device into security units and requires the user to respond to authenticating query signals to establish authentication. Moreover, one looking to enhance silicon chips would not look to the use of security units and encryption devices to enhance the chip itself. In fact, the encryption device of Wirstrom could not physically be inserted into any semiconductor substrate. Accordingly, there is no suggestion

or motivation to combine Kadambi with Wirstrom and Applicant respectfully maintains that amended Claims 1, 16, and 25 are in condition for allowance.

5) There is no reasonable expectation of success that the alleged combination of Kadambi and Wirstrom will result in the claimed invention.

As stated above, one could not combine Kadambi with Wirstrom. The alleged combination would require an encryption device to be inserted into a semiconductor substrate to obtain authentication, which is not physically possible.

Accordingly, since the prior art references do not teach or suggest all the claim limitations, there is no motivation to combine the prior art references, and there is no reasonable expectation of success that the alleged combination will result in the claimed invention, it can not be said that Kadambi and Wirstrom renders the claimed invention obvious. Thus, it is respectfully requested that this rejection be withdrawn.

The Second 35 U.S.C. § 103 Rejection

Claims 10-15 and 21-24 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kadambi et al (USP 2001/0043611 A1) in view of Brilliant et al. (USP 3,558,823), among which claim 10 is an independent claim. This rejection is respectfully traversed.

Specifically, the Office Action contends that the elements of the presently claimed invention are disclosed in Kadambi except that Kadambi does not "teach each of said plurality of memories coupled to one of said plurality of port bundles." The Office Action further contends that Brilliant "teaches having a plurality of port bundles (trunk groups) comprising a plurality of

memories (see claim 14)" and that it would be obvious to one having ordinary skill in the art at the time of the invention to "include the feature of having a plurality of port bundles (trunk groups) comprising a plurality of memories so that each port bundle has its own memory." Applicant respectfully disagrees for the reasons, among others, set forth below.

Kadambi and Brilliant both fail to teach or suggest "a port bundle logical object coupled to each of the plurality of memories to associate the subscriber with the port bundle" as provided for in amended Claim 10. The Office Action cites page 2, [0009] as allegedly providing evidence of this teaching. However, the citation states:

> [0009] An internal memory is provided, and communicates with the at least one first data port interface and the at least one second data port interface. A memory management unit is provided, and includes an external memory interface for communicating data with at least one of the first data port interface and the second data port interface and an external memory. A communication channel is provided, with the communication channel communicating data and messaging information between the at least one first data port interface, the at least one second data port interface, the internal memory, and the memory management unit. **The memory management unit directs data from one of the first data port and the second data port to one of the internal memory and the external memory interface, according to a predetermined algorithm.**

The Office Action further cites Claim 14 of Brilliant, which teaches "a plurality of trunk groups each comprising a plurality of memories receiving information at a first rate as multibit words in repetitive channels ... a plurality of memories for transmitting said information to said trunks at said first rate."

The Office Action failed to address Applicant's previous argument. However, as shown above, Kadambi merely teaches directing data from one port to another according to a predetermined algorithm and not with the use of a port bundle object having a table pairing subscriber information with port bundle information. Brilliant merely teaches memories which

transmit information to a trunk at a certain rate. Neither Kadambi nor Brilliant teaches "a port bundle logical object coupled to each of the plurality of memories to associate the subscriber with the port bundle" as claimed in amended Claim 10. Should the Examiner maintain this rejection, it is respectfully requested that the Examiner point out specifically where in paragraph [0009] does Kadambi teach "a port bundle logical object coupled to each of the plurality of memories to associate the subscriber with the port bundle" so that Applicant may provide a meaningful rebuttal.

Accordingly, since the prior art references do not teach or suggest all the claim limitations, it can not be said that Kadambi and Brilliant renders the claimed invention obvious. Thus, it is respectfully requested that this rejection be withdrawn.

Dependent Claims

As to the dependent claims, the argument set forth above is equally applicable here. The base claims being allowable, the dependent claims must also be allowable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance. It is respectfully requested that this rejection be withdrawn.

Request For Interview

Applicant's Attorney respectfully requests an interview with the Examiner Tang and Examiner Tang's supervisor, Examiner Meng-Ai An, before the next Office Action to expedite

the prosecution of this application. This application has been pending since April 23, 2001 with each Office Action failing to adequately address issues raised by the Applicant, being non-responsive, and providing vague rejections in which Applicant has attempted to address in each Response. Thus, Applicant's Attorney formally requests an interview before the next Office Action and may be reached at the number indicated below.

Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Respectfully submitted,

THELEN REID & PRIEST, LLP

Dated: 4/5/05

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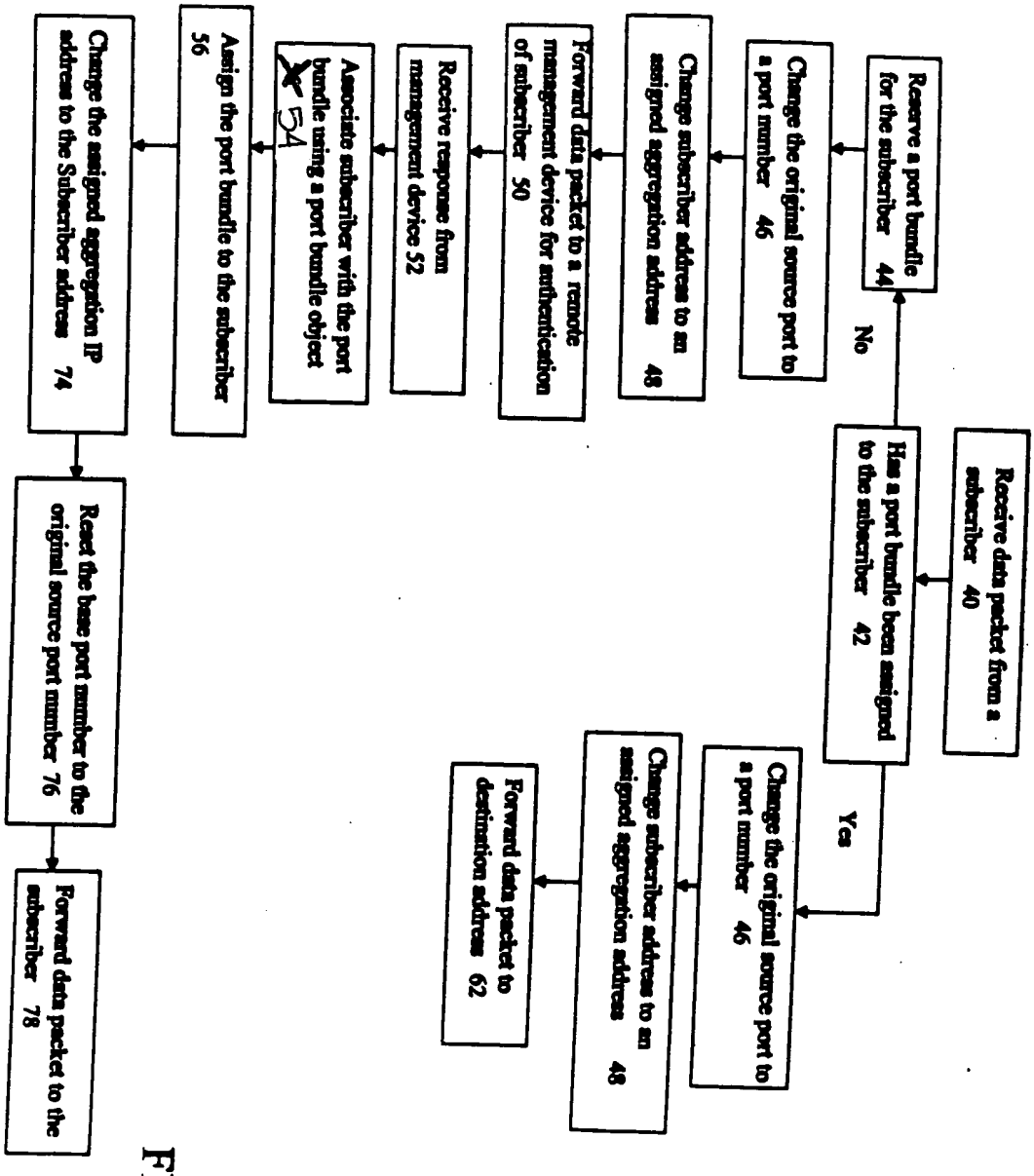

FIG. 5